

Amendments to the Claims:

This listing of claims will replace all prior version, and listings, of claims in the application.

Listing of Claims:

1 (Currently amended) A method for automatically instantiating built-in-system test (BIST) modules in memory designs, comprising the steps of:

- (a) providing a server over a network that integrates a set of design tools, including an automated front-end software process and an automated back-end software process;
- (b) allowing a user to access the server over the network and enter a request for a memory design;
- (c) executing the front-end software process to automatically generate a netlist of a BIST from the user request; and
- (d) executing the back-end software process to automatically generate a placement and route view of the BIST
 - (i) generating an initial size estimate of an area needed for the memory;
 - (ii) allocating a memory having an area of that size;
 - (iii) performing placement and routing; and
 - (iv) assessing whether the allocated area is sufficient, and if not, incrementing the size of the memory and iterating again.

2 (Original) The method of claim 1 wherein step (b) further includes the step of allowing the user to access the server via a standard Web browser.

3 (Original) The method of claim 2 wherein step (b) further includes the step of allowing a user to enter the request by entering data into a form and identifying an input script file containing a series of user input command lines.

4 (Original) The method of claim 3 wherein step (b) further includes the step of receiving from the request a number of words and bits in the memory.

5 (Original) The method of claim 4 wherein step (c) further includes the step of in putting the command lines from the input script file into appropriate software design tools.

6 (Canceled)

7 (Currently amended) The method of claim ~~6-5~~ further including the step of providing a random access memory (RAM) as the memory, and generating a RAMBIST for the memory.

8 (Canceled)

9 (Canceled)

10 (Canceled)

11 (Canceled)

12 (Canceled)

13 (Canceled)

14 (Canceled)

15 (Currently amended) A computer readable medium containing program instructions for ~~automatically a~~ method for automatically instantiating built-in-system test (BIST) modules in memory designs, comprising the steps of:

- (a) providing a server over a network that integrates a set of design tools, including an automated front-end software process and an automated back-end software process;
- (b) allowing a user to access the server over the network and enter a request for a memory design;
- (c) executing the front-end software process to automatically generate a netlist of a BIST from the user request; and
- (d) executing the back-end software process to automatically generate a placement and route view of the BIST
 - (i) generating an initial size estimate of an area needed for the memory;
 - (ii) allocating a memory having an area of that size;
 - (iii) performing placement and routing; and
 - (iv) assessing whether the allocated area is sufficient, and if not, incrementing the size of the memory and iterating again.

16 (Original) The computer readable medium of claim 15 wherein instruction (b) further includes the instruction of allowing the user to access the server via a standard Web

browser.

17 (Original) The computer readable medium of claim 16 wherein instruction (b) further includes the instruction of allowing a user to enter the request by entering data into a form and identifying an input script file containing a series of user input command lines.

18 (Original) The computer readable medium of claim 17 wherein instruction (b) further includes the instruction of receiving from the request a number of words and bits in the memory.

19 (Original) The computer readable medium of claim 18 wherein instruction (c) further includes the instruction of in putting the command lines from the input script file into appropriate software design tools.

20 (Canceled)

21 (~~Currently amended~~) The computer readable medium of claim ~~20-19~~ further including the instruction of providing a random access memory (RAM) as the memory, and generating a RAMBIST for the memory.

22 (Canceled)

23 (Canceled)

24 (Canceled)

25 (Canceled)

26 (Canceled)

27 (Canceled)

28 (Canceled)

29 (Canceled)